

REMARKS

The Examiner has withdrawn the previous rejections under 35 U.S.C. §102(b) over Linscott and Hunt. However, the Examiner has now rejected claims 1 through 3, 5 through 10, 13 through 20 and 22 under 35 U.S.C. §103. In view of the following remarks, Applicants respectfully submit the Examiner to reconsider the pending rejections.

The Section 103 Rejections

The Examiner has now rejected claims 1 through 3, 5, 6, 8, 13, 15, 16, 20 and 22 under 35 U.S.C. §103 as being obvious by Iseman and Smerud et al. Although the detail Office Action in Paragraph 7 indicates that the rejection basis of the above claims is under 35 U.S.C. §102, the undersigned has clarified with the Examiner that the correct rejection basis is based upon 35 U.S.C. §103 as being obvious over Iseman et al. in view of Smerud et al. The Examiner has alleged that Iseman et al. teach a dynamo including an elastic housing and the stator core having a different coefficient. The Examiner has further pointed out the projections are formed on the inner surface of the housing in the Iseman reference. For the lack of disclosure on a compression mechanism in the Iseman et al. reference, the Examiner has further combined the Smerud et al. reference to teach the compression mechanism.

The Examiner has now rejected claims 1, 2, 5, 6, 8, 13 through 15 and 20 under 35 U.S.C. §103 as being obvious by Hunt and Smerud et al. Although the detail Office Action in Paragraph 8 indicates that the rejection basis of the above claims is under 35 U.S.C. §102, the undersigned has clarified with the Examiner that the correct rejection basis is based upon 35 U.S.C. §103 as being obvious over Hunt et al. in view of Smerud et al. Although the Examiner has alleged in Paragraph 8 that "Iseman teaches every aspect of the invention" except for a gas compressor," the undersigned assumed that the Hunt reference instead of the Iseman et al.

reference. The Examiner has pointed out that Hunt teaches the housing having recesses 27 by the concave flexing of the housing away from the core. For the lack of disclosure on a compression mechanism in the Hunt reference, the Examiner has further combined the Smerud et al. reference to teach the compression mechanism.

Newly amended independent claim 1 explicitly recites “the housing ... having a plurality of recesses which are formed near the elastic part extending outwardly in the radial direction of the inner circumferential surface to define corresponding first voids.” Newly amended independent claim 1 further explicitly recites “second voids are defined between the inner circumferential surface outside the recesses of the housing and the outer circumferential surface of the stator core so as to prevent the inner and the outer circumferential surfaces from contacting each other in a circular region.” Lastly, newly amended independent claim 1 explicitly recites “the first voids and the second voids extend substantially along the length of the stator core in the direction of the central axis of the stator core.” In other words, the recesses of the housing are structurally different from the voids. For example, the first void 32a is formed by the elastic part 36 of the housing 25 while the second void 32b is formed between the inner circumferential surface outside the recesses of the housing 25 and the outer circumferential surface of the stator core 16 as illustrated in FIGURES 7 and 8 as explicitly recited by independent claim 1. Both “the first voids and the second voids extend substantially along the length of the stator core in the direction of the central axis of the stator core” as supported by the disclosure at lines 10 through 14 on page 10 of the current application.

The Iseman et al. reference discloses a “Dynamoelectric Machines With Stator Positioning.” As illustrated in figures 3, 4, 5 and 6, the stator 22 is placed in the housing 12, and the projections 26 on the stator 22 form an internal space or a recess between the stator 22 and the housing 12. Furthermore, the Iseman et al. reference discloses that the projections are alternatively formed on the housing 22 to form the recess between the stator 22 and the housing

12. However, the disclosure is limited to one form of recesses between the stator 22 and the housing 12.

The Hunt reference discloses a brushless electric generator having the stator core 19 placed in the housing 18 for the interference fit. The channels or recesses 27 are formed between the housing 18 and the stator core 19 and extend axially through the state core. The channels 27 are also interconnected by the peripheral grooves 22, which are substantially perpendicular to the channels 27 as shown in figures 1 and 2. While the channels 27 extend the length of the stator core 19, the grooves 22 are limited to a narrow band within the stator core 19 and fail to extend the length of the stator core 19 as shown in figure 1.

The Smerud et al. reference discloses a "Control of Suction Gas and Lubricant Flow In A Scroll Compressor." A scroll-type compressor is disclosed with a motor having a stator, and a continuous flow as indicated by an arrow 300 illustrates a passage between the front and rear portions in the housing. However, there is no disclosure on the structural relation between the housing unit and the stator.

In sharp contrast, newly amended independent claim 1 explicitly calls for "the first voids and the second voids extend substantially along the length of the stator core in the direction of the central axis of the stator core." As described above, the Iseman et al. reference discloses only a single form of uniform voids between the housing and the stator. The Iseman et al. reference fails to teach, disclose or suggest "the first voids" and "the second voids" as called for by newly amended independent claim 1. Similarly, the Smerud et al. reference also fails to teach, disclose or suggest "the first voids" and "the second voids" as called for by newly amended independent claim 1. Let alone, the Smerud et al. reference fails to disclose, teach or suggest any structural relation for forming a void between the housing and the stator. Even if these two references are combined as the Examiner has done, the combined disclosures still fail

to disclose, teach or suggest “the first voids” and “the second voids” as explicitly recited in newly amended independent claim 1. Thus, Applicants respectfully submit that it would not have been obvious to one of ordinary skill in the art to provide “the first voids” and “the second voids” as explicitly recited in newly amended claim 1 based upon the alleged combined disclosures.

Dependent claims 2, 3, 5, 6, 13, 15, 16, 20 and 22 ultimately depend from newly amended independent claim 1 and incorporate the above patentable feature of the current invention. Dependent claims 8 and 20 have been cancelled. Therefore, Applicants respectfully submit to the Examiner that the rejection of claims 1 through 3, 5, 6, 8, 13, 15, 16, 20 and 22 under 35 U.S.C. §103 in view of Iseman et al. and Smerud et al. should be withdrawn.

Similarly, the second set of the combined Hunt and Smerud et al. references also fails to teach, disclose or suggest the patentable features of the current invention. As described above, although the Hunt reference discloses the channels 17, the groove 22 is a limited band within the stator core 19. The Hunt reference fails to teach, disclose or suggest “first voids” and “the second voids” that both “extend substantially along the length of the stator core in the direction of the central axis of the stator core” as called for by newly amended independent claim 1. As already described above, the Smerud et al. reference also fails to teach, disclose or suggest “the first voids” and “the second voids” as called for by newly amended independent claim 1. Let alone, the Smerud et al. reference fails to disclose, teach or suggest any structural relation for forming a void between the housing and the stator. Even if these two references are combined as the Examiner has done, the combined disclosures still fail to disclose, teach or suggest “the first voids” and “the second voids” as explicitly recited in newly amended independent claim 1. Thus, Applicants respectfully submit that it would not have been obvious to one of ordinary skill in the art to provide “the first voids” and “the second voids” as explicitly recited in newly amended claim 1 based upon the alleged combined disclosures.

Dependent claims 2, 5, 6, 13 through 15 and 19 ultimately depend from newly amended independent claim 1 and incorporate the above patentable feature of the current invention. Dependent claims 8 and 20 have been cancelled. Therefore, Applicants respectfully submit to the Examiner that the rejection of claims 1, 2, 5, 6, 8, 13 through 15 and 20 under 35 U.S.C. §103 in view of Hunt and Smerud et al. should be also withdrawn.

In addition, the Examiner has rejected claims 7 and 10 under 35 U.S.C. §103 in view of Iseman or Hunt in further view of Smerud et al. and Brown. Similarly, the Examiner has rejected claim 9 under 35 U.S.C. §103 in view of Iseman or Hunt in further view of Smerud et al. Furthermore, the Examiner has rejected claims 17 and 18 under 35 U.S.C. §103 in view of Iseman or Hunt in further view of Smerud et al. and Murakami et al. Lastly, the Examiner has rejected claim 19 under 35 U.S.C. §103 in view of Iseman or Hunt in further view of Smerud et al. and Hattori. Claim 10 has been cancelled. Dependent claims 7, 9, 17, 18 and 19 each depend from newly amended independent claim 1. Each rejection basis of these dependent claims involves Iseman or Hunt under 35 U.S.C. §103. As described above, neither of these cited references fails to teach, disclose or suggest the above discussed patentable features of the current invention as explicitly recited in newly amended independent claim 1. The additionally cited prior art references also fail to teach, disclose or suggest the above discussed patentable features of the current invention as explicitly recited in newly amended independent claim 1. Therefore, Applicants respectfully submit to the Examiner that the rejection of dependent claims 7, 9, 10, 17, 18 and 19 under 35 U.S.C. §103 should be also withdrawn.

CONCLUSION

In view of the above amendments and the foregoing remarks, Applicant respectfully submits that all of the pending claims are in condition for allowance and respectfully requests a favorable Office Action so indicating.

Respectfully submitted,

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A handwritten signature in black ink, appearing to be 'Ken I. Yoshida', written over a horizontal line.

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